

BUREAU OF WATER

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

Wastewater Treatment System Permitting

A guide to DHEC's approval process for wastewater treatment systems which discharge to surface water or land apply



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South Carolina Department of Health
and Environmental Control

www.scdhec.net/water

Preface

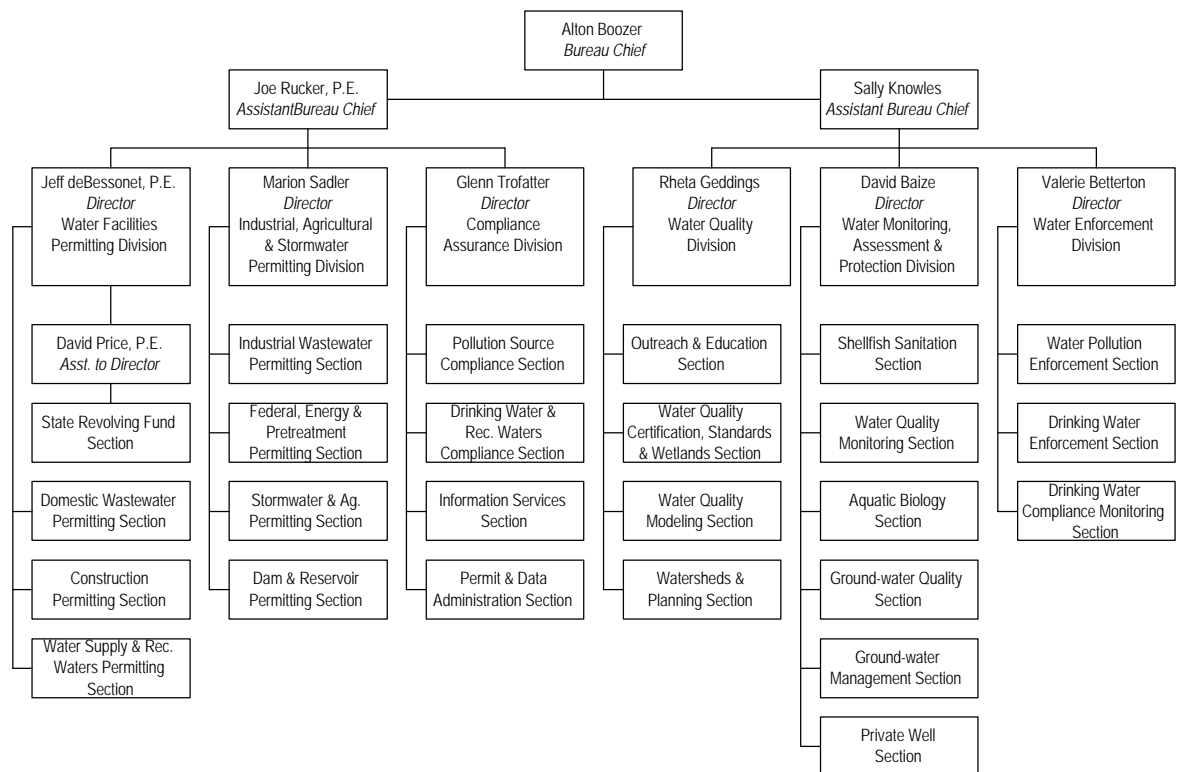
This document has been prepared for use by consulting engineers, developers, industries, and public entities dealing with the Bureau of Water on wastewater treatment system projects. It provides:

- ☞ An overview of the Bureau's responsibilities,
- ☞ A summary of regulatory requirements,
- ☞ Identification of the entities involved in permitting, and
- ☞ Highlights of the review and approval procedures.

We hope this document will help everyone have a better understanding of the wastewater treatment system permitting program. Through this understanding, we feel it will be easier to go through the administrative processes, technical reviews, and approval processes of the Bureau.

This document provides an explanation of the Bureau's decision making processes. Our decisions are made based on the technical, administrative, and legal aspects of a wastewater treatment system project with the protection of the environment and public health as the major considerations.

The Bureau is committed to providing quality service in a reasonable time in all aspects of the permit programs. To do this, we need the cooperation of all parties who deal with us in recognizing our responsibilities and the manner in which we implement them. Therefore, please take the time to read this document carefully. This document is not a replacement for the regulations on wastewater treatment system projects. If you have any questions about our wastewater treatment system permitting program, please let us know. We welcome any comments you may have on this document or suggestions on how we can improve our service to you and the public.



Why?



Why are permits needed for wastewater treatment system construction?



They are required by state law/regulations. DHEC's review ensures that reliable systems are built for the protection of public health and the environment.

The Pollution Control Act (PCA) of SC, Title 48 of the 1976 Code of Laws as amended, in Section 48-1-20 declares the public policy of the State. The public policy is to maintain reasonable standards of purity of air and waters of the State while allowing for development of the state. This policy is to allow for maximum employment, protection of public health, and protection of terrestrial and marine flora and fauna. Also, physical property and other resources are to be protected. This responsibility requires that DHEC abate, control, and prevent pollution.

Discharge Permits. Section 402 of the Federal Clean Water Act (CWA) requires a National Pollutant Discharge Elimination System (NPDES) permit for point source discharges to surface waters. The EPA has delegated the federal NPDES Permit program to DHEC's Bureau of Water. Also, Section 48-1-100 of the PCA requires a discharge permit be issued before a discharge to surface water or ground water can occur. For surface water discharges, this state discharge permit is the NPDES permit while for land application systems the state permit is a Land Application System permit, also known as a "No Discharge" or "ND" permit.

DHEC's Regulation 61-9, entitled "Water Pollution Control Permits," addresses these effluent permits. This regulation contains the administrative and technical requirements for NPDES permits and Land Application System permits.

Further, both the CWA and Regulation 61-9 require NPDES permits to contain appropriate effluent limitations to protect water quality while Land Application System permit requirements are addressed in Regulation 61-9. Therefore, NPDES permits and Land Application System permits contain effluent limitations for conventional pollutants, toxic pollutants, etc. that are established to protect water quality standards and public health.

Construction Permits. Section 48-1-110 of the PCA requires the submittal of plans and specifications to DHEC for any new disposal system or for any modification, extension, or change to an existing disposal system. The Act defines the term "disposal system" to include both treatment and sewerage systems (collection systems). This section also makes it unlawful to construct or modify a disposal system until DHEC issues a written permit.

Wastewater treatment system permits, while being required by law, help prevent pollution problems.

Under the authority of the PCA, DHEC's Regulation 61-67, entitled "Standards for Wastewater Facility Construction," addresses construction permits for wastewater treatment system projects. This regulation contains administrative and technical design requirements for preliminary engineering reports and construction permit applications for wastewater treatment system projects.

For new or expanding wastewater treatment systems, the effluent disposal permit must be issued before a construction permit can be issued and a construction permit must be issued before construction is started. Also, written authorization to place the system into operation must be granted by DHEC before wastewater treatment systems can be used. Written authorizations to begin operation are issued by the District Offices of Environmental Quality Control (EQC) after construction is completed.

This permitting guide is not a substitute for Regulations 61-9 and 61-67. When questions arise about a wastewater treatment system project, Regulations 61-9 and 61-67 are the controlling factors despite the content of this guide. You are encouraged to obtain these regulations from DHEC and read them so you can have a complete understanding of the requirements for wastewater treatment systems.

Where?



Where do I apply for permits?



DHEC's Bureau of Water is responsible for permitting wastewater treatment systems:

2600 Bull Street, Columbia, SC 29201

The Bureau of Water (Bureau) is under the Office of Environmental Quality Control (EQC) of DHEC. The Bureau is responsible for protecting the quality of the State's surface and ground water and ensuring safe drinking water for the public. To meet this responsibility, the Bureau issues permits, approvals, and certifications for a variety of wastewater and drinking water projects. This booklet explains the permitting procedures of the Bureau for wastewater treatment systems.

Two divisions of the Bureau of Water are responsible for issuing effluent disposal and construction permits on wastewater treatment systems:

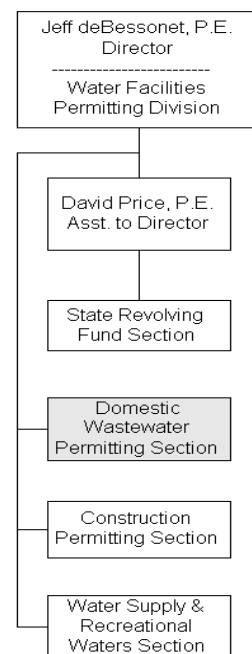
- ⇒ Water Facilities Permitting Division
- ⇒ Industrial, Agricultural, and Storm Water Permitting Division

The project owner and the type of project (e.g., subdivision, federal facility, etc.) determine which division handles a particular project.

BUREAU OF WATER: Water Facilities Permitting Division

The Water Facilities Permitting Division handles publicly and privately-owned wastewater treatment system projects not categorized as industrial. The *Domestic Wastewater Permitting Section* has primary responsibility for issuing state construction permits for new or expanding domestic wastewater treatment systems that are privately owned (excluding industries) or publicly-owned. Upgrades (without an expansion) of domestic wastewater treatment systems that are privately owned (excluding industries) or publicly-owned wastewater treatment systems are also handled by the Domestic Wastewater Permitting Section.

Wastewater treatment system projects handled by the Domestic Wastewater Permitting Section include the following:



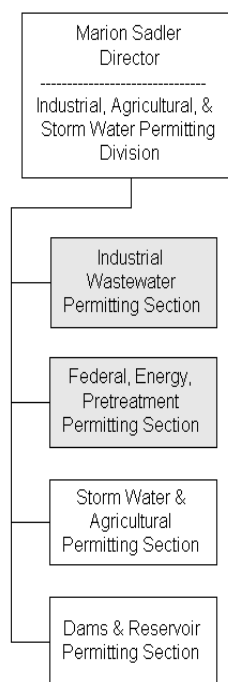
- | | |
|-----------------------------|--|
| 1. Subdivisions | 12. Hotels and Motels |
| 2. Apartments | 13. Office Parks |
| 3. Condominiums | 14. Stadiums |
| 4. Trailer Parks | 15. Retail Stores and Malls |
| 5. Camp Grounds | 16. Fairgrounds |
| 6. Restaurants | 17. Parks |
| 7. Health Care Facilities | 18. Schools |
| 8. Highway Rest Fac. | 19. Country Clubs |
| 9. Churches | 20. Publicly Owned Systems |
| 10. Prison Facilities | 21. Truck Stops and Gas Stations with only domestic wastewater |
| 11. Private Sewer Utilities | 21. Any Other Type Project Not Categorized As Industrial |

BUREAU OF WATER: Industrial, Agricultural & Storm Water Permitting Division

The Industrial, Agricultural, and Storm Water Permitting Division handles wastewater treatment systems owned by industries and federal agencies. This Division has two (2) sections that permit these projects:

- ⇒ Industrial Wastewater Permitting Section, and
- ⇒ Federal/Energy/Pretreatment Permitting Section.

The *Industrial Wastewater Permitting Section* handles industrial projects even if the wastewater is strictly domestic waste. Manufacturing plants, car washes, laundromats, abattoirs, funeral homes, and gas stations and truck stops with more than just domestic wastewater are included in the Industrial Section's responsibilities. The *Federal/Energy/Pretreatment Permitting Section* handles federally-owned and operated facilities, energy facilities (power plants), mining projects, aquaculture projects, pulp and paper mills, concentrated aquatic animal production facilities, and industrial pretreatment facilities.



Others Involved in the Permitting Process

State agencies, other program areas of DHEC, and organizations may be involved in the wastewater treatment system permitting program of the Bureau. The Bureau will coordinate with most of these entities by providing basic information on the project to them. If these entities need more information, they will request it from the consulting engineer. During the review of a project, the Bureau will notify the consulting engineer concerning other entities.

Normally, an effluent disposal permit or a construction permit will not be issued until all the certifications, comments, and permits are received from these entities. Therefore, at the

start of a project, the consulting engineer may wish to contact the entities involved in the project. This will help avoid delays in the Bureau's permitting process.

The following entities are involved in the Bureau's permitting programs. Their type of involvement is given along with information concerning their requirements or permits.

Council of Governments

The Bureau coordinates with the appropriate 208 Planning Agency (including five of the ten Council of Government [COG] organizations) to ensure the project is in compliance with the approved 208 Plan (Water Quality Management Plan) for the area. The 208 Plans have been prepared in accordance with Section 208 of the federal Clean Water Act. South Carolina has five designated 208 planning areas. The COGs in the designated 208 areas are responsible for the 208 Plan of their area, while the Bureau is responsible for the areas of the State that are not designated. Refer to Appendix 1 for a list of the designated COGs, their addresses, telephone numbers, and the counties in their 208 areas.

DHEC's Office of Ocean and Coastal Resources Management

The Bureau of Water coordinates with DHEC's Office of Ocean and Coastal Resources Management (OCRM) on all wastewater treatment system projects located in a county under OCRM's jurisdiction. These coastal counties are Horry, Georgetown, Berkeley, Charleston, Dorchester, Colleton, Beaufort, and Jasper.

An information form on the project is sent to OCRM. OCRM will decide whether the project is in compliance with the Coastal Zone Management Plan. If OCRM needs any additional information on the project, they will request it directly from the project's consulting engineer. OCRM's review includes a public notice of applications for consistency certification.

Also, OCRM has authority for sediment and erosion control permitting in the eight coastal counties and certain permitting activities in the "critical zone." The critical zone is generally defined as the area of salt water influence.

EQC District Offices

The Bureau may request comments from the appropriate District Office of EQC. The District Office will provide information to the Bureau on the proposed treatment system. Also, written authorizations for wastewater treatment systems to be placed into operation are granted by the District Offices. Refer to Appendix 2 for a list of the District Offices, the counties for which each is responsible, their telephone numbers, and their addresses.

SC Department of Commerce

The SC Department of Commerce (Commerce Department) maintains a geographical information system (GIS) on the location of wastewater treatment systems. This program is called the S.C. Infrastructure Program (SCIP). The Bureau participates in the SCIP

program by providing the Commerce Department with information on certain treatment plants.

Copies of the construction permits and overall layouts of the sewer systems on projects permitted by the Water Facilities Permitting Division are provided to the Commerce Department. Also, the Bureau gives the Commerce Department an inventory on the treatment plants handled by the Division. This inventory gives the capacity, permitted flow, and remaining permit capacity at each treatment plant. The inventory also includes other information on the treatment plants such as location, discharge point, enforcement activity, comments, and the 208 Plan status. Industrial facilities are not normally included in this activity. The Commerce Department uses this information in their day to day activities.

Other Related Permits

Construction of wastewater treatment systems may also require other DHEC permits. If you are unclear, contact our office. Other permitting functions may include:

- ⇒ Sediment and erosion control permit,
- ⇒ NPDES storm water construction activity permit,
- ⇒ NPDES storm water industrial activity (excluding construction) permit,
- ⇒ Navigable waterway permit,
- ⇒ Interbasin transfer permit, and
- ⇒ Air Emissions Permits for incinerators and air strippers or fugitive emissions from open tanks.

Regarding NPDES storm water, most projects can be covered under a general permit issued by DHEC. To streamline permitting, application for the sediment and erosion control permit serves as a notice of intent to get coverage under the NPDES storm water construction activity permit. A storm water pollution prevention plan (SWPPP) is prepared and a Notice of Intent (NOI) filed to obtain coverage under the NPDES storm water industrial activity permit. The SWPPP is not submitted with the NOI to obtain coverage under the general permit for NPDES storm water industrial activity (excluding construction) unless requested by the Department.

If identified during the wastewater treatment facility permitting process, the review for compliance with the navigable waterway program can be performed concurrently with any conditions added to the wastewater treatment facility construction permit.

The interbasin transfer permitting must track separately, but can parallel the wastewater treatment process. If a wastewater treatment system project would by design, transfer enough water to require an interbasin transfer permit, DHEC can issue the wastewater treatment system permits with a condition not to exceed the quantity thresholds (e.g., one million gallons per day). If the discharge rate will be one million gallons per day or larger, an interbasin transfer permit will be required. For air permits, consulting engineers are encouraged to contact the Department's Bureau of Air Quality to determine if any air permits are needed.

How?



How do I apply for permits?



For upgrades without expansions, the application package consists of a PER, a construction permit application, construction/specifications, an application fee and certain administrative material. For new or expanding wastewater treatment systems, the initial application package consists of a completed effluent disposal permit application form and a PER. Once the effluent disposal permit is issued, a construction permit application, construction plans/specifications, an application fee and certain administrative material is submitted.

For wastewater treatment system upgrades without an expansion, a preliminary engineering report (PER) and plans and specifications are submitted to the appropriate Section of the Bureau. These wastewater treatment system upgrade projects have multiple phases which are:

- ⇒ *Phase I:* PER
- ⇒ *Phase II:* Plans/specs (construction permit application)
- ⇒ *Phase III:* Operational Approval

Each phase must be completed via Bureau approval before the project can go to the next phase. However, depending on the complexity of the upgrade, the PER and plans and specifications may be combined and submitted together.

There is a construction permit application fee for upgrades of wastewater treatment system projects. The following box identifies applicable application fees.

Construction Application Fees for Upgrades

Upgrade of facilities 1.0 MGD or larger without an expansion:
\$550

For new or expanding wastewater treatment systems, a preliminary engineering report (PER), effluent disposal permit application, and plans and specifications are submitted to

the appropriate Section of the Bureau. These wastewater treatment system projects have multiple phases which are:

- ⇒ *Phase I:* PER
- ⇒ *Phase II:* Effluent Disposal Permit
- ⇒ *Phase III:* Plans/specs (construction permit application)
- ⇒ *Phase IV:* Operational Approval

Each phase must be completed via Bureau approval before the project can go to the next phase.

There is no application fee for a PER and while there is not an application fee for an effluent disposal permit, there are annual operating fees. The first year's fee must be paid with no proration before the effluent disposal permit can be issued. The box below identifies the annual operating fees.

Annual Operating Fees for NPDES/ND Permits

FACILITIES WITH FIVE OR LESS DISCHARGE PIPES

<i>Permit Flow Value</i>	<i>Fee</i>
➤ Equal to or greater than 5,000,000 gal/day	\$2,660
➤ 2,000,000 gal/day to 4,999,999 gal/day	\$2,130
➤ 1,000,000 gal/day to 1,999,999 gal/day	\$1,600
➤ 500,000 gal/day to 999,999 gal/day	\$1,330
➤ 100,000 gal/day to 499,999 gal/day	\$1,065
➤ 50,000 gal/day to 99,999 gal/day	\$800
➤ Zero to 49,999 gal/day	\$530

FACILITIES WITH MORE THAN FIVE DISCHARGE PIPES

All facilities pay \$1,600 plus \$800 per discharge pipe over five pipes.

Once an effluent disposal permit is issued, fees are assessed annually to persons who hold effective permits on July 1st of each year. This includes non-operational facilities even if the facility has not been built and continues until the permit is canceled. Therefore, any facility with an active operating permit on July 1st is subject to the fee for the state Fiscal Year (July 1-June 30) with no proration of fees.

On existing facilities, inspection for closure by DHEC personnel does not automatically cancel a permit. Cancellation of a permit does not dismiss outstanding permit fees. It is your responsibility to advise DHEC in writing of any change and/or cancellation of a permit. If possible, for facilities that close toward the end of the Fiscal Year, it is recommended that requests for cancellation be submitted to the Department at least ninety (90) days prior to July 1. This will ensure your permit is canceled before July 1 so you will not be billed the next Fiscal Year for an active permit on a facility that has closed.

If in the future you need to cancel your permit, notify the NPDES/ND Permit Administration Section at the Bureau address.

The following box identifies applicable application fees for new or expanding wastewater treatment system projects.

Construction Application Fees for New & Expanding Facilities

Facilities 1.0 MGD or Larger:

a: New facility:	\$1,050
b: Expansion of an existing facility:	\$800

Facilities less than 1.0 MGD

a. New facility:	\$700
b. Expansion of an existing facility:	\$550

To be conservative, new or expansion projects should be submitted at least one year prior to the date a construction permit will be needed while upgrades should be submitted at least six months in advance. The actual review time will vary. This will depend upon the complexity of the project, whether a public hearing is required on the effluent disposal permit, whether the effluent disposal permit is appealed, and the workload of the Bureau when the project is submitted.

Phase I: PER

A PER is required for all wastewater treatment system projects. See Regulation 61-67 for details.

a. Submittal Package

A complete administrative package must be submitted by an engineer registered in SC. The submittal package must include information in the following box.

1. A transmittal letter outlining the submittal package.
2. Three (3) copies of a PER prepared according to Regulation 61-67, entitled "Standards for Wastewater Facility Construction." The consulting engineer's registration stamp must be on each report.
3. For new and expanding wastewater treatment systems, an effluent disposal permit application. For facilities with a surface water discharge, the effluent disposal permit application will be the NPDES permit application. For facilities with land application of the effluent (spray irrigation, tile field, rapid infiltration, etc.) the "Application for a Land Disposal System Permit" will be used. Refer to Appendix 3 for a list of the effluent disposal permit applications.
4. Three (3) copies of the report on the method of sludge disposal, if applicable. For more information on this, see Appendix 4 on "Sludge Disposal and Use."
5. If the wastewater treatment facility has land disposal as the proposed method of effluent disposal, three (3) copies of a report on the proposed ground water monitoring program. This report should give the number and location of the existing and proposed monitoring wells. It should also contain the proposed parameters to be monitored and their frequency of analysis.
6. Three (3) copies of an 8 ½" x 11" location map.

The PER submittal package should be sent to the appropriate Section Manager of the Bureau at the following address:

*Bureau of Water
DHEC
2600 Bull Street
Columbia, SC 29201*

An incomplete submittal may be returned. Therefore, please ensure the submittal package contains the correct number of copies of each item. Also, ensure the appropriate effluent disposal permit application is completely filled out and signed by the appropriate person. We recommend a preliminary conference with a member of the appropriate Section if there are any questions about the PER process.

b. Administrative Processing

Upon receipt of a PER, the project will normally be assigned to a member of the Section handling the project within a week of receipt. An acknowledgment letter will normally be sent to the consulting engineer. If the PER has been assigned, this letter will contain the name and telephone number of the project manager and an estimated review time. If the PER has not been assigned, the letter will give an estimated time for assignment and review.

c. Effluent Limitations Guidelines

For certain categories of industries, the EPA has developed effluent limitations that give the maximum allowed loading for parameters of concern for the industry based upon its production. These limitations or allowed loadings are contained in the Effluent Limitations Guidelines promulgated by the EPA as federal regulations for most categories of industries. The NPDES application requires the applicant to determine if effluent guidelines are applicable to their facility. The Bureau will review the applicant's determination on whether or not an Effluent Limitation Guideline exists for the category of industry being proposed.

For a project with an Effluent Limitation Guideline that is proposing a surface water discharge, the effluent limitations will be established using the more stringent of the water quality based limitations established using the procedure below and the Effluent Limitations Guidelines.

d. Wasteload Allocations for Surface Water Discharges

For surface water discharges, the Bureau will establish a wasteload allocation for the receiving stream. Two regulations will be used in this procedure. Regulation 61-69, entitled "Classified Waters," lists the classification of those streams classified by name. For a stream not classified by name, Regulation 61-68, entitled "Water Classifications and Standards," establishes the stream classification. Section C, paragraph 5 of this regulation states the following: "Where surface waters are not classified by name in "Classified Waters," (Regulation 61-69), the use classification and numeric standards of the stream to which they are tributary apply, disregarding any site-specific numeric standards for that waterbody." Regulation 61-68 also gives the narrative and numeric standards for all waters of the state.

Almost all surface water dischargers must provide a minimum degree of treatment. For industries with a federal Effluent Limitation Guideline, the guideline will provide the minimum degree of treatment. For domestic wastewater, the minimum degree of treatment will be secondary treatment as defined by the EPA. Secondary limits for domestic wastewater on a monthly average are as follows:

BOD₅ - 30 mg/l (lagoons or trickling filters may qualify for 45 mg/l)

Suspended Solids - 30 mg/l (lagoons may qualify for 90 mg/l, while trickling filters may qualify for 45 mg/l)

If the secondary limitations or the Effluent Limitation Guidelines do not meet stream standards, then more stringent limitations will be established to protect the water quality of the receiving stream.

The wasteload allocation procedure for oxygen demanding substances normally uses a computerized mathematical model of the receiving stream. This model simulates the effect of the discharge on the dissolved oxygen (DO) in the stream. Numerical effluent limits for five day BOD, ammonia, DO, total residual chlorine (TRC), etc. will be established.

For conservative parameters, such as metals, that cause, or have the reasonable potential to cause, or contribute to a violation of water quality standards, effluent limitations for the parameter will be established using a simple mass balance approach to ensure water quality standards will not be violated. These limits will protect the water quality standards of the stream as given in Regulation 61-68.

Also, effluent limitations on toxic compounds and whole effluent toxicity will be established in accordance with the requirements of Regulation 61-68 and Regulation 61-9.

Water quality data from the Bureau monitoring stations will be used, when available, in deriving effluent limits. At times more data or a detailed study will be needed to evaluate the proposed discharge. The Bureau will perform or require the permittee to perform whatever sampling or study is necessary to evaluate the proposed discharge.

For discharges to ditches or wet weather streams, the Bureau publication entitled "Guidelines on the Acceptance Policy Governing Wastewater Discharges to Dry and Wet Weather Streams, and Dry Ditches" will be used in the review of the PER. In general, a discharge to a wet weather stream or a ditch will not be viewed favorably.

At times a receiving stream's assimilative capacity must be allocated among discharges. For the designated 208 Planning areas of the State, the responsible COG will divide the allowed loading according to their procedures. For the non-designated areas of the State, the Bureau divides the allowed loading using a procedure for allocation of assimilative capacity which has been adopted in the State's 208 Plan for the Non-Designated Areas.

e. Antidegradation Considerations

In accordance with Regulation 61-68, entitled "Water Classifications and Standards," proposed or expanding discharges to "high quality" surface waters can only be permitted if the Department finds, after intergovernmental coordination and public participation, that allowing lower water quality is necessary to important economic or social development in the areas where the waters are located. "High Quality" waters are those waters whose quality exceeds levels necessary to support propagation of fish, shellfish, and wildlife, and recreation in and on the water. The PER must contain an alternative analysis that shows there are no economically and technologically reasonable alternatives to the lowering of water quality. On all new or expanding

discharges, the Department will conduct an antidegradation review to determine whether or not the discharge can be allowed. If a discharge is allowed, the antidegradation review will also determine the appropriate conditions and limits for the discharge.

f. Coordination with other DHEC Programs and other Entities

Other DHEC staff (outside of permitting) may be involved in the project review depending on the scope of the project. Examples of programs areas include:

- ⇒ District Office (field visits for new discharge proposals)
- ⇒ Shellfish Program (evaluating impacts on shellfish harvesting)
- ⇒ Recreational Waters Program (evaluating downstream regulated swimming areas)
- ⇒ Drinking Water Source Water Protection Program (evaluating water intake issues).

For existing facilities, a review of the Bureau's wastewater treatment plant files and operating history of the facility will be conducted. This will be to see if any problems exist or if enforcement action has been or will be taken that will prevent the approval of the PER. For new discharges, the Bureau may request the permit applicant to provide a compliance history on other similar permits issued to them by other States or the EPA. A history of violations of an existing effluent disposal permit may result in a disapproval of a PER on an expansion. The decision on the preliminary approval will be made based on the severity of the problems.

For facilities in the coastal zone, the PER review will be coordinated with DHEC's Office of Ocean and Coastal Resource Management (OCRM). An information form on the project will be sent to OCRM. They will decide whether the project is in compliance with the Coastal Zone Management Plan. If they need any additional information on the project, they will request it directly from the consulting engineer. While OCRM does not normally certify PERs (in contrast to permits), their input is helpful to the development of the plans and specifications.

The PER review will be coordinated with the appropriate COG. An information form on the project will be sent to the COG. They will decide whether the project is in compliance with the approved Water Quality Management Plan (208 Plan). If they need any additional information on the project, they will request it directly from the consulting engineer. Some COGs charge the permit applicant a fee for this certification. The Bureau will normally require COG certification for an approval during the PER phase of a project.

g. Land Disposal Permits

For land disposal projects, the effluent limitations normally will be established as secondary. If secondary limitations will not protect the quality of the ground water, more stringent effluent limitations will be established.

A site inspection will be conducted by the Ground Water Quality Section of the Bureau to confirm the suitability of the proposed land application site. Also, this Section will review the soils characterization report and approve the construction of the ground water monitoring wells. The monitoring wells must be installed in accordance with Regulation 61- 71, entitled "Well Standards and Regulations." As with surface water discharges, if Shellfish, Water Supply, and Recreational Waters are involved, comments will be received from the appropriate program area(s).

See Section 505 of Regulation 61-9 for specific requirements on several types of land application systems.

h. PER Approvals and Extensions

Upon receipt of all comments and the completion of the PER review, a decision will be made. A letter of approval or disapproval will be sent to the consulting engineer and/or the permit applicant. All approvals will be conditional upon the public notice requirements of the effluent disposal permit. PER approvals will normally be valid for one hundred eighty (180) days. Also, approval of a PER is not a commitment by the Bureau to issue an effluent disposal permit or construction permit.

If an approval expires or is within thirty (30) days from expiring, the consulting engineer can make a written request to the project manager to extend the approval. Extensions will be granted after a reevaluation of the proposed project shows the proposal is still acceptable.

Phase II: Effluent Disposal Permit Issuance

a. Draft Permit

After approval of a PER, the appropriate effluent disposal permit will be drafted by the Bureau project manager. For surface water discharges, this permit is the NPDES permit, while, for land disposal systems, the permit is the Land Application System permit commonly called a No Discharge (ND) permit. The draft permit will contain the proposed effluent limitations, monitoring requirements, reporting requirements, and other obligations of the permittee. The draft permit will be processed according to Regulation 61-9, entitled "Water Pollution Control Permits."

b. Coordination with Other Entities

The draft permit will be sent to the permittee and the appropriate District Office of EQC. They will be given twenty (20) days to comment on the draft permit. Also, major NPDES permits (as defined by the EPA) and significant minor NPDES permits will be sent to the EPA for comments. The EPA has thirty (30) days to comment on the draft permit. The comments will be reviewed and the draft permit will be modified if necessary.

c. Public Notice of Intent to Issue

The Bureau will then place the draft permit with an intent to issue statement on public notice for thirty (30) days. For new and expanding discharges, the public notice will appear in a newspaper of general circulation in the area of the project. Four (4) signs will be posted in the area surrounding the discharge point or wastewater treatment facility site. Also, the Bureau will mail a copy of the public notice to persons on the Bureau's NPDES/ND mailing list. The public notice will request interested citizens, groups, etc. to send their comments on the draft permit to the Bureau. The public notice with the intent to issue statement is not a commitment by the Bureau to issue the proposed permit.

d. Review of Comments and Public Hearing

After the public notice period, the Bureau will review the comments received. If the Bureau does not receive comments, the Bureau staff will review the project file and decide to issue or deny the proposed permit. If the Bureau receives comments and they show significant cause or sufficient public interest, a public hearing will be held.

A public notice announcing the public hearing will be published in the same newspaper used to publish the intent to issue the draft permit. Also, everyone who sent a comment to the Bureau will receive a copy of the public notice on the hearing. The public notice on the hearing will give at least a thirty (30) day notice on the date of the hearing. It also will contain the time and place of the hearing. Normally, the public hearing will be held in the evening in the general area of the proposed project.

At the public hearing, the Bureau will present the draft permit and the preliminary decision. The permittee will be given the opportunity to make a brief oral presentation. The public will then have the opportunity to make comments. A court reporter will record the hearing and provide the Bureau a copy of the hearing transcript. This transcript will be available for review by the public.

e. Staff's Final Determination

Bureau staff will review the project file, the hearing record (if a hearing was held), and any other documents or information necessary to make a final determination. Based on this review, a final determination will be made by Bureau staff to:

- ⇒ Issue the permit as proposed,
- ⇒ Issue the permit with modifications, or
- ⇒ Deny the permit.

The staff's final determination may be published in the same newspaper used for the previous public notices if there are significant changes to the permit. Also, everyone who attended the hearing or sent written comments to the Bureau will receive a copy of the final determination.

The final determination will contain the Bureau staff's decision on the proposed permit. If the final permit is different from the draft permit, the final determination will list the changes to the draft permit. The final determination also will contain a summary of the administrative appeal procedures if any party wants to appeal the Bureau staff's decision. The permit is not effective until fifteen (15) days have lapsed without appeal.

If an appeal is filed, the proposed permit or permit modifications are automatically stayed pending further administrative review. If no comments were received that requested a change in the permit conditions, the permit may be effective on the date of issue.

f. Appeal of Staff's Final Determination

An appeal of the staff decision must be made within fifteen (15) days of the notice of final determination. The South Carolina Administrative Procedures Act (APA) will govern all permit appeals.

Regulation 61-72, entitled "Procedures for Contested Cases," and the Operating Procedures of the Administrative Law Judge Division establish the procedures for all appeals and specify the contents of an appeal. Appeals must be sent to: Clerk of the Board, Department of Health and Environmental Control, 2600 Bull Street, Columbia, SC, 29201.

Upon receipt of an appeal, the appeal will be forwarded to the State's Administrative Law Judge Division, where an Administrative Law Judge (ALJ) will be appointed to hear the case. The permit action is automatically stayed until either the conclusion of the administrative appeal process or an ALJ decision allows the stay to be lifted. Testimony and evidence will be presented to the ALJ in a formal hearing. A court reporter will record the proceedings and provide a transcript to the attorneys for each party if requested.

After the hearing, the ALJ will issue a written ruling on the matter. Any party can file an appeal of the ALJ's ruling to the DHEC Board. This appeal must be filed within thirty days of the ALJ's decision. If no appeal of the ALJ's ruling is made to the DHEC Board, the ALJ's ruling is final. If an appeal is filed with the DHEC Board to review the ALJ's ruling, the Board will make the final agency decision on the proposed permit at a regularly scheduled monthly meeting. All participants in the administrative hearing may present brief written or oral arguments to the Board. The Board may accept, modify, or reject the ruling of the ALJ. If the automatic stay of staff's permit decision is still in effect, the stay is lifted when the Board makes their decision.

g. Appeal of Board's Final Decision

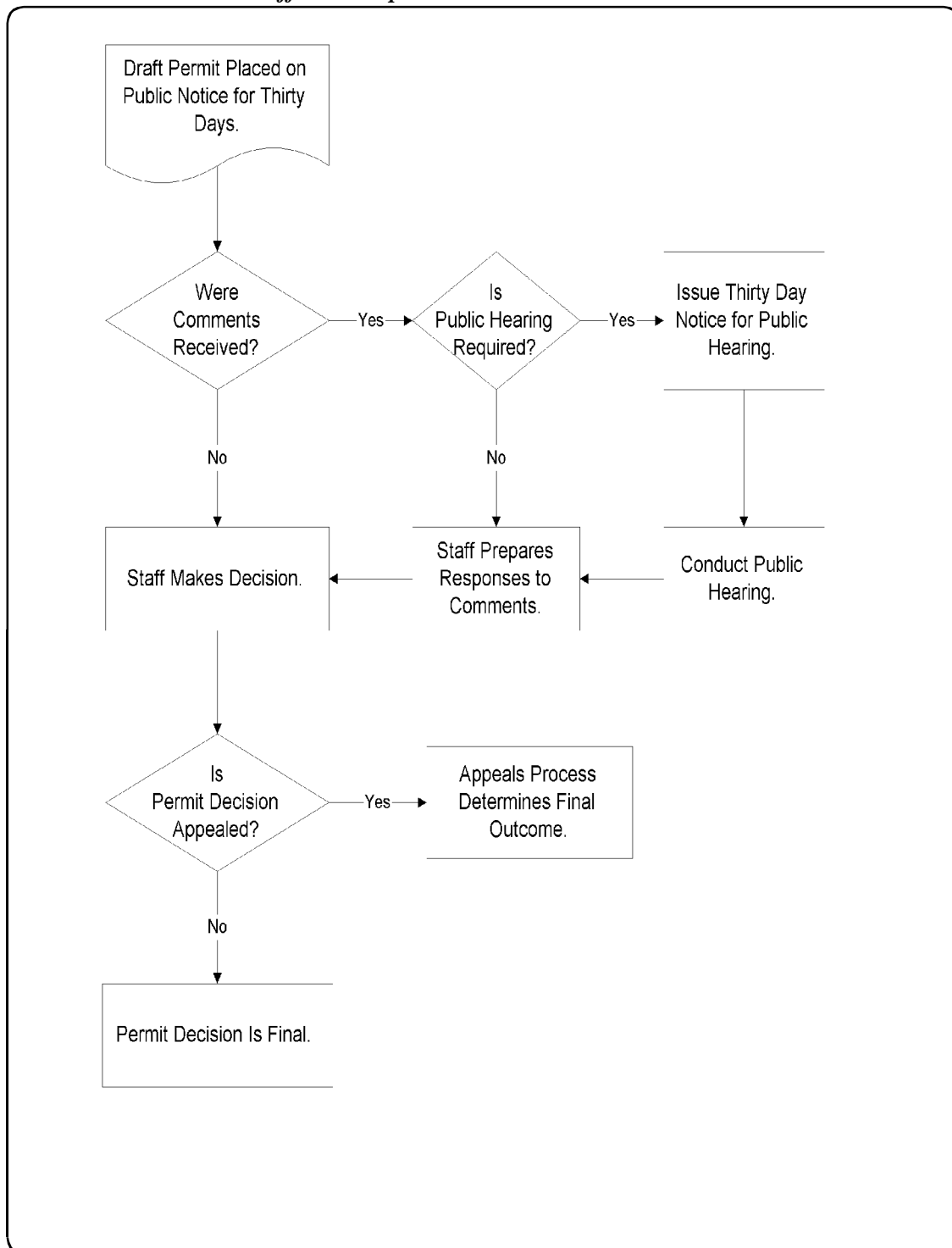
After the Board's final decision, any party adversely affected by the decision has thirty (30) days to appeal the agency's final decision to Circuit Court. The APA governs the appeal process. If an appeal is not filed in Circuit Court, the Board's decision will determine the final status of the proposed permit. If an appeal is filed, then the Court's decision will determine the final status of the proposed permit. Any party appealing

the Board's decision can request the Court to grant a stay on the permit decision until the conclusion the appeal process.

h. Procedural Diagram

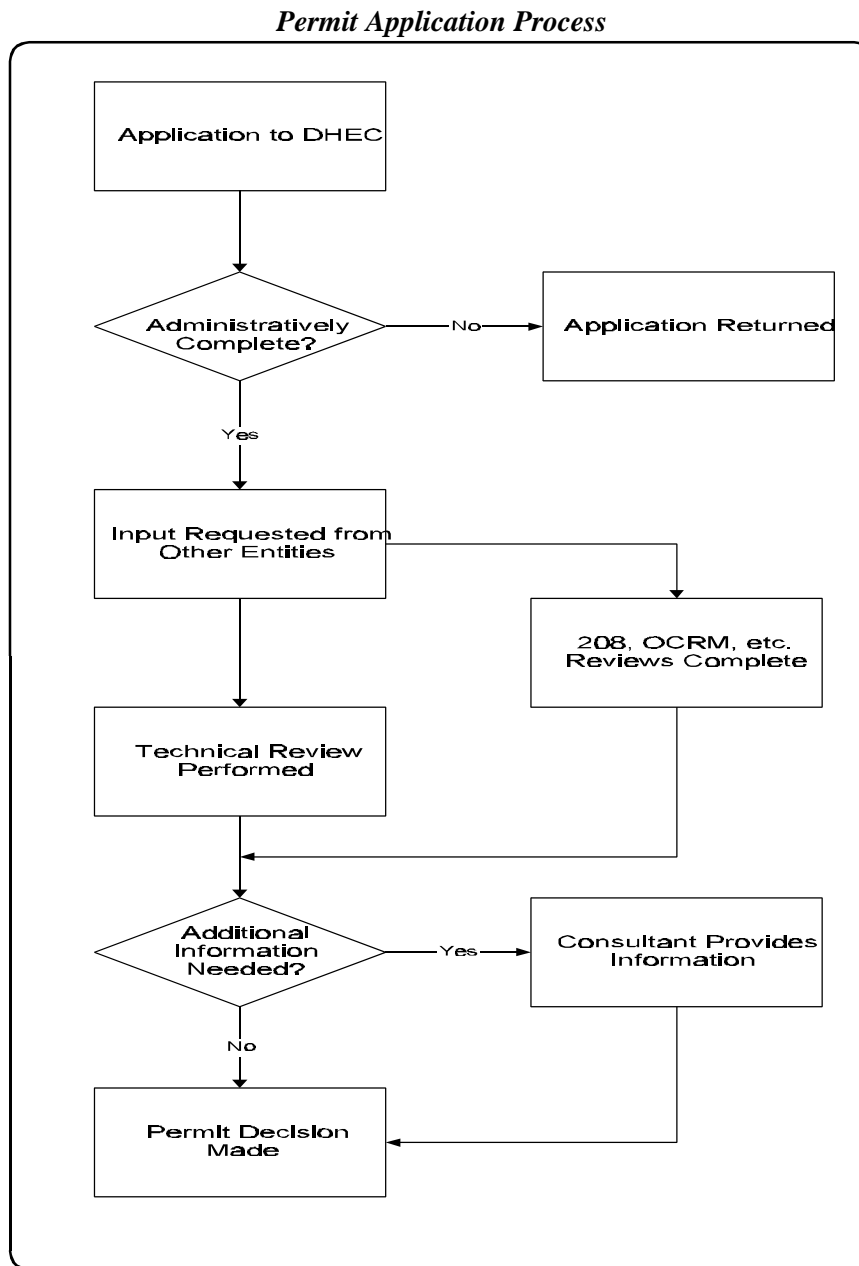
The following diagram shows the procedures of the effluent disposal permit issuance phase of a new wastewater treatment facility or expansion of an existing wastewater treatment facility. This diagram shows the major paths for processing an effluent disposal permit after a draft permit is finalized. The estimated time for issuing an effluent disposal permit is six months. The actual time may be different for a given permit based on the complexity or sensitivity of the proposed permit.

The following diagram shows the procedures of the effluent disposal permit issuance phase of a new wastewater treatment facility or expansion of an existing wastewater treatment facility.

Effluent Disposal Permit Issuance Process

Phase III: Plans and Specifications (Construction Permit Application)

Submittal of a set of plans and specifications as part of the application for a permit to construct is summarized in the chart below and then described.



a. Submittal Package

A complete administrative package must be submitted by an engineer registered in SC. The submittal package must include information in the following box:

Plans & Specs Submittal Information

1. A transmittal letter outlining the submittal package.
2. Three (3) sets of plans and specifications stamped by the consulting engineer.
3. The original application for permit to construct properly filled out with the appropriate signatures and two (2) copies.
4. Three (3) copies of the easements necessary to build the project. This is not needed if the project is owned by a public entity with the right of eminent domain.
5. Three (3) copies of the appropriate design calculations including flow and pump station calculations with the pump curves.
6. Three (3) copies of an 8 ½" x 11" location map. This should be separate from the plans. Therefore, even if there is a location map on the plans there still needs to be a separate map on an 8 ½" x 11" sheet of paper with two (2) copies.
7. One (1) overall layout sheet separate from the plans. This layout must show the wastewater treatment plant in relation to existing streets, the location of all equipment and the discharge point. This sheet will be sent to the Development Board when the project is permitted.
8. The appropriate fee as given in Regulation 61-30, entitled, "Environmental Protection Fees."

The submittal package should be sent to the attention of the appropriate Section Manager of the Bureau at the following address:

*Bureau of Water
DHEC
2600 Bull Street
Columbia, SC 29201*

An incomplete submittal may be returned. Therefore, please ensure the submittal package contains the correct number of copies of each item with proper signatures.

b. Administrative Processing

The review of construction projects will be on a "first come/first serve" basis by each program area. Therefore, construction plans and specifications will be reviewed in chronological order based on the submittal date of the complete package. Upon receipt of a construction permit application package, the project will be placed in line for review.

An acknowledgment letter will normally be sent to the consulting engineer for the project. For a complete submittal, this letter will usually give an estimated time before

the project will be assigned to a member of the Section handling the project for review. Normally, the reviewer of the PER will also review the plans and specifications.

Also, for a complete submittal, the requests for comments from the entities involved in the permitting process will be sent when the project is initially received. The requests will be sent to the appropriate District Office of EQC, the appropriate Council of Governments, and OCRM for projects in coastal counties.

c. Plan Review

When a project is assigned to a reviewer, the project will be reviewed on a technical and administrative basis. The administrative review will involve ensuring the Bureau coordinates with the appropriate entities besides the entities already requested to provide comments when the project was initially received.

On an upgrade of an existing facility without an expansion where the PER and plans and specifications are submitted together, a review of the Bureau's WWTP files will be conducted to see if any problems exist or if any type of enforcement action has been or will be taken that will prevent the issuance of a construction permit.

The technical review will be done using criteria in Regulation 61-67 and, as appropriate, criteria in "Recommended Standards for Sewerage Works" (commonly called "Ten State Standards"), EPA design manuals, EPA Development Documents and standard reference books commonly used in the field of wastewater treatment.

d. Construction Permit Issuance

When the project meets all administrative and technical requirements, a construction permit will be issued. The original permit will be sent to the project owner and a copy will be sent to the consulting engineer.

The construction permit will have two expiration dates. The first date will be the expiration date if construction does not start by the specified date. Normally, this date will be one year after the date of issue. The second expiration date will be the expiration date if construction is not completed by the specified date. Normally, this date will be two years from the date of issue. However, either of these dates may be coordinated with the Bureau's Enforcement Section, as appropriate. In any case, an enforceable schedule in an order or effluent disposal permit dictates.

e. Extension of a Construction Permit

If a construction permit expires or is within thirty (30) days of expiring, the consulting engineer can request an extension of the permit. This request should be made in writing with a copy of the construction permit attached. The request should be addressed to the appropriate Section Manager. If a permit expires after the Bureau grants an extension, all future requests for extensions should include a copy of the permit and a copy of each Bureau extension letter.

Upon receipt of a request for a permit extension, the Bureau will review the project file to decide if an extension can be granted. Also, comments from the appropriate EQC District Office may be requested. If no problems exist, the Bureau will grant an extension on the permit. The extension normally will be for one year from the date of the extension letter.

If the Bureau denies a request for a construction permit extension, either the construction plans and specifications will be revised to show the updated requirements or another PER will be required to address the needed changes. If the Bureau requires another PER, new plans and specifications will be submitted after the Bureau approves the PER. In either case, the letter denying the extension will list the course of action to be followed.

Under some circumstances, a request for a construction permit extension will be denied and the effluent disposal permit will be revoked. A letter will be written to the consulting engineer stating the extension cannot be granted. Also, the Bureau will notify the project owner that the effluent disposal permit will be revoked unless a request for a hearing is received. The PCA in Section 48-1-50, item 5, gives the project owner the right to an adjudicatory hearing on the revocation of the effluent disposal permit. If the Bureau receives a request for a hearing, the status of the extension of the construction permit will be determined after the hearing. If the Bureau does not receive a hearing request, the permit extension will be denied.

f. Owner Changes After Construction Permit Is Issued

If the project owner changes after a construction permit is issued and the consulting engineer remains the same, the consulting engineer must submit a new, original construction permit application with two (2) copies showing the new project owner. The application must be completely filled out and signed by the engineer(s) responsible for the design and construction even if the new owner does not change engineers. Then, either the construction permit will be reissued to the new owner or a letter written approving the change of owner.

If the new project owner changes consulting engineers after a construction permit is issued, then the new engineer must submit a new original construction permit application with two (2) copies. The application must be completely filled out and signed by the engineer(s) responsible for the design and construction. Also, a copy of a release letter written to the new engineer from the original design engineer must be submitted. This release letter must give the new engineer the right to use the design plans prepared by the original engineer. Upon receipt of this information, either the construction permit will be issued to the new owner or a letter written approving the change of owner.

If for any reason the original design engineer will not provide a release letter, the construction permit will not be reissued to the new owner. Further, the new owner is not authorized to start or continue construction until a construction permit is issued to them. However, if construction is complete when the owner changes engineers, the permit to operate will not be issued until the appropriate release is obtained from the original design engineer and the permit is reissued to the new owner.

If a release is not obtained by the new engineer, then the Bureau will not issue a permit to place the system into operation and may revoke the construction permit. If the permit is revoked, it will be necessary for the new engineer to resubmit the project as a new project with a complete submittal package. This submittal will be handled according to the procedures listed previously.

g. Engineer Changes After Construction Permit Is Issued

While unique situations arise, most cases would be handled as follows. Since the permit to construct was based on an application indicating that the original engineer would certify the construction phase, then an approval to place the system into operation cannot be granted without additional information. If the project owner changes engineers after a construction permit is issued, a new application (with 2 copies) should be submitted. In that application, the new engineer would sign the item regarding the certification of construction, but not the design. In addition, DHEC would be looking for information indicating that this change of engineers was consistent with regulations governing the practice of engineering. The type of information that could be submitted would include copies of:

- ⇒ Letter of release from the original engineer.
- ⇒ Letter from the owner terminating the services of the original engineer.

In a situation where the second engineer sought to alter the original design, a new application and resubmittal of plans and specifications would be appropriate.

h. Modifications to Approved Plans

Modifications to the plans and specifications after a construction permit is issued will be handled as a new submittal. A complete administrative package must be submitted. The administrative review process for modified plans and specifications will be essentially the same process as given in the sections entitled "Administrative Processing" and "Plan Review." However, there will normally be no coordination with the COGs, OCRM, etc. on the review and approval of modified plans.

Phase IV: Operational Approval

a. Construction

After the Bureau issues the construction permit, the project can be built. The consulting engineer will perform construction inspections as required by the application for permit to construct. Also, DHEC may perform construction inspections.

b. Authorization to Place the System into Service

When construction is complete, the consulting engineer will send a letter to the appropriate District Office of EQC certifying the project is built according to the permitted plans and specifications. Also, additional items may need to accompany the letter of construction certification such as:

- ⇒ A copy of the record drawings.
- ⇒ A letter of final acceptance for ownership, operation and maintenance of the system from the appropriate entity.
- ⇒ When applicable, a letter from OCRM stating their certification requirements have been met.
- ⇒ Pump test results, if applicable.

Contact the applicable District Office (Appendix 2) to obtain specific details on a submission package.

c. As-built Plans

If construction is not according to the approved plans and specifications but the changes are acceptable to the consulting engineer, as-built plans must be submitted to the appropriate Section for review and approval. The submittal package for as-built plans must include the items in the following box.

As-Built Submittal Information

1. A transmittal letter outlining the submittal. This letter must reference the project by the name (as shown on the construction permit), county, and construction permit number. It also must list the changes to the approved plans.
2. Two (2) sets of the as-built plans and, if necessary, specifications.

This submittal package must be mailed to the appropriate Section Manager. The administrative review process for as-built plans and specifications will be essentially the same process as given in the sections entitled "Administrative Processing" and "Plan Review." However, there will normally be no coordination with the COGs, OCRM, etc. on the review and approval of as-built plans, unless a new permit is required based on the changes being significant.

After approval of the as-built plans, the consulting engineer will send a letter to the appropriate District Office certifying the project is built according to the approved as-built plans and specifications. The procedures given in the section entitled "Authorization to Place the System into Service" will be followed for granting authorization to place the system into service.

If the Bureau does not approve the as-built plans, the project must be rebuilt according to the approved plans and specifications. After the contractor rebuilds the project according to the approved plans and specifications, the consulting engineer will send a letter to the appropriate District Office certifying the project is built according to the approved plans and specifications. The procedures given in the section entitled "Authorization to Place the System into Service" will be followed for issuance of the final approval to operate.

APPENDIX 1

Designated 208 Planning Agencies

<i>Councils of Governments</i>
Appalachian Council of Governments Drawer 6668 Greenville, SC 29606 864-242-9733 (fax: 242-6957) <i>Anderson, Cherokee, Greenville, Oconee, Pickens, and Spartanburg Counties</i>
Berkeley-Charleston-Dorchester Council of Governments 5290 Rivers Avenue N. Charleston, SC 29418-6357 843-529-0400 (fax: 529-0305) <i>Berkeley, Charleston, and Dorchester Counties</i>
Central Midlands Council of Governments 236 Stoneridge Drive Columbia, SC 29210 803-376-5390 (fax: 376-5394) <i>Fairfield, Kershaw, Lexington, Newberry, and Richland Counties</i>
Lowcountry Council of Governments Box 98 Yemassee, SC 29945 843-726-5536 (fax: 726-5165) <i>Beaufort, Colleton, Hampton, and Jasper Counties</i>
Waccamaw Regional Planning and Development Council 1230 Highmarket Street Georgetown, SC 29440 843-546-8502 (fax: 527-2302) <i>Georgetown, Horry, and Williamsburg Counties</i>

In correspondence to the Councils, we suggest that you address correspondence to the "208 Water Quality Manager."

In all other non-designated counties, SCDHEC is the 208 Planning Agency:

Abbeville, Aiken, Allendale, Bamberg, Barnwell, Calhoun, Chester, Chesterfield, Clarendon, Darlington, Dillon, Edgefield, Florence, Greenwood, Lancaster, Laurens, Lee, Marion, Marlboro, McCormick, Orangeburg, Saluda, Sumter, Union, and York

Inquiries to:

Doug Fabel
803-898-4222

at

SCDHEC

Watersheds and Planning Section
2600 Bull Street
Columbia, SC 29201

APPENDIX 2

Offices for Approval to Place Projects into Operation

<i>DHEC District Offices of EQC</i>	
Appalachia I 2404 N. Main Street Anderson, SC 29621 864-260-5569 (fax: 260-4855) <i>Anderson and Oconee Counties</i>	Lower Savannah 206 Beaufort Street, NE Aiken, SC 29801 803-641-7670 (fax: 641-7675) <i>Aiken, Allendale, Bamberg, Barnwell, Calhoun and Orangeburg Counties</i>
Appalachia II 301 University Ridge, Suite 5800 Greenville, SC 29601 864-241-1090 (fax: 241-1092) <i>Greenville and Pickens Counties</i>	Pee Dee 145 E. Cheves Street Florence, SC 29506 843-661-4825 (fax: 661-4858) <i>Chesterfield, Darlington, Dillon, Florence, Marion and Marlboro Counties</i>
Appalachia III 975-C N. Church Street Spartanburg, SC 29303 864-596-3800 (fax: 596-2136) <i>Cherokee, Spartanburg and Union Counties</i>	Trident 1362 McMillan Ave., Suite 300 Charleston, SC 29405 843-740-1590 (fax: 740-1595) <i>Berkeley, Charleston and Dorchester Counties</i>
Catawba P.O. Box 100 Fort Lawn, SC 29714 803-285-7461 (fax: 285-5594) <i>Chester, Lancaster and York Counties</i>	Upper Savannah 613 South Main Street Greenwood, SC 29646 864-223-0333 (fax: 223-6935) <i>Abbeville, Edgefield, Greenwood, Laurens, McCormick and Saluda Counties</i>
Central Midlands P.O. Box 156 State Park, SC 29147 803-898-0620 (fax: 898-0617) <i>Fairfield, Lexington, Newberry and Richland Counties</i>	Waccamaw 1705 Oak Street Plaza, Suite #2 Myrtle Beach, SC 29577 843-448-1902 (fax: 946-9390) <i>Georgetown, Horry and Williamsburg Counties</i>
Low Country 104 Parker Drive Burton, SC 29906 843-846-1030 (fax: 846-0604) <i>Beaufort, Colleton, Hampton and Jasper Counties</i>	Wateree 105 Magnolia Street Sumter, SC 29151 803-778-1531 (fax: 773-6366) <i>Clarendon, Kershaw, Lee and Sumter Counties</i>

APPENDIX 3

List of Effluent Disposal Permit Applications

I. Applications for Surface Water Discharges (NPDES Permits)

1. Aquaculture Facilities

All facilities (new NPDES permits and renewals of existing NPDES permits) - State Form 2B and the location supplement to the NPDES application.

2. Industrial Facilities

- A. New industries - Form 2D, Form 1, the location supplement to the NPDES application, the anti-degradation supplement, and the sludge supplement to the NPDES application. Please note that Form 2E may be suitable for new industries which discharge only non-process wastewater.
- B. Existing industries with process wastewater (renewals) -Form 2C, Form 1, the location supplement to the NPDES application, and the sludge supplement to the NPDES application.
- C. Existing industries with non-process wastewater (renewals) - Form 2E, Form 1, the location supplement to the NPDES application, and the sludge supplement to the NPDES application.

3. Privately Owned Domestic Facilities (not Industrial)

All facilities (new NPDES permits and renewals of existing NPDES permits) - Short Form D, the location supplement to the NPDES application, and the sludge supplement to the NPDES application.

4. Municipal Facilities

All facilities (new NPDES permits and renewals of existing NPDES permits) - EPA Forms 2A and 2S, the location supplement to the NPDES application, the anti-degradation supplement, and the sludge supplement to the NPDES application.

5. General Permits Except Storm Water

At the time of publication of this document, the Bureau had issued general permits for ten categories of industrial type discharges. These were mine dewatering, utility water (non-contact cooling water, boiler blowdown, and steam condensate), petroleum contaminated groundwater, aquaculture facilities, potable water plants (three permits), vehicle wash waters, oil and gas pipeline hydrostatic test waters, and bulk oil and gas terminals. Except for the general NPDES Permits for vehicle wash water, utility water, hydrostatic test water, and petroleum contaminated ground water which have "Notice of Intent" forms, the appropriate application for these general permits is the same application that would be used if applying for an individual permit.

6. Storm Water Permits

A. Individual Permit Applications

- a) All individual applications except construction sites - Form 2F. For industrial facilities Form 1 must also be included.
- b) Construction sites five (5) acres or larger - Form 1 and a map.

B. General Permit Notices of Intent

- a) All associated with industrial activity categories - EPA Notice of Intent (EPA Form 3510-6)

II. Applications for Land Disposal System Permits (ND Permits)

All Facilities - Application for a Land Disposal System Permit and the sludge supplement to the ND permit application.

APPENDIX 4

Sludge Disposal and Use

All publicly owned and privately owned treatment facilities treating domestic wastewater are regulated by federal regulations 40 CFR 257, 403, 503. 40 CFR 503 deals with use and disposal of domestic sludge. This federal regulation has been adopted by the Bureau and is included in Regulation 61-9 under Section 503. Also, the Bureau has adopted state regulations for use and disposal of industrial sludge not regulated either under R.61-9.503 or as a hazardous waste. The industrial sludge regulations are in Section 504 of Regulation 61-9. Therefore, the disposal of sludge generated from all wastewater treatment facilities is regulated by the Bureau.

For a new wastewater treatment facility or an expansion of an existing wastewater treatment facility, a report on the method of sludge disposal is included in the effluent disposal permit application/PER submittal package. This sludge report must be prepared according to the "Sludge Disposal Report" information which is a part of the "Sludge Disposal Supplement" for NPDES/ND permit applications. The sludge report must address the applicable criteria contained in Sections 503 and 504 of Regulation 61-9.

The method of sludge disposal is reviewed with the PER on the wastewater treatment facility. After approval of the PER, the effluent disposal permit will be drafted with the method of sludge disposal contained in it. Therefore, the procedures for processing a new wastewater treatment facility or an expansion of an existing wastewater treatment facility will include sludge handling for the wastewater treatment facility. This involves a public notice with the opportunity for a public hearing, an adjudicatory hearing, and any appeals. When the method of sludge disposal is a dedicated land disposal site, the signs for the public notice will be posted at the sludge disposal site in addition to the wastewater treatment facility site and discharge point or effluent disposal site.

For additional information on land application of sludge, please see the Bureau publication entitled "Beneficial Use of Wastewater Biosolids."